



## **Board of Adjustment**

### **Remote Study Session**

**DATE:** September 27, 2003  
**TIME:** 9:00 AM  
**LOCATION:** Constantine Property  
8755 E Dixileta Drive

Interested parties are invited to observe Study Sessions, although discussion is limited to the participation of Board Members and City staff. Public comment is reserved for the Regular Meeting.

#### **Roll Call**

#### **Discussion Items**

1. Demonstration of Race Track and Helicopter

#### **Adjournment**



## Current Planning Services

One Civic Center  
7447 E Indian School Road, Suite 105  
Scottsdale, AZ 85251

---

**DATE:** September 23, 2003

**TO:** Board of Adjustment Members

**FROM:** Jayna Shewak  
Development Planning Manager

**RE:** Study Session on September 27th @ 8755 E Dixileta

---

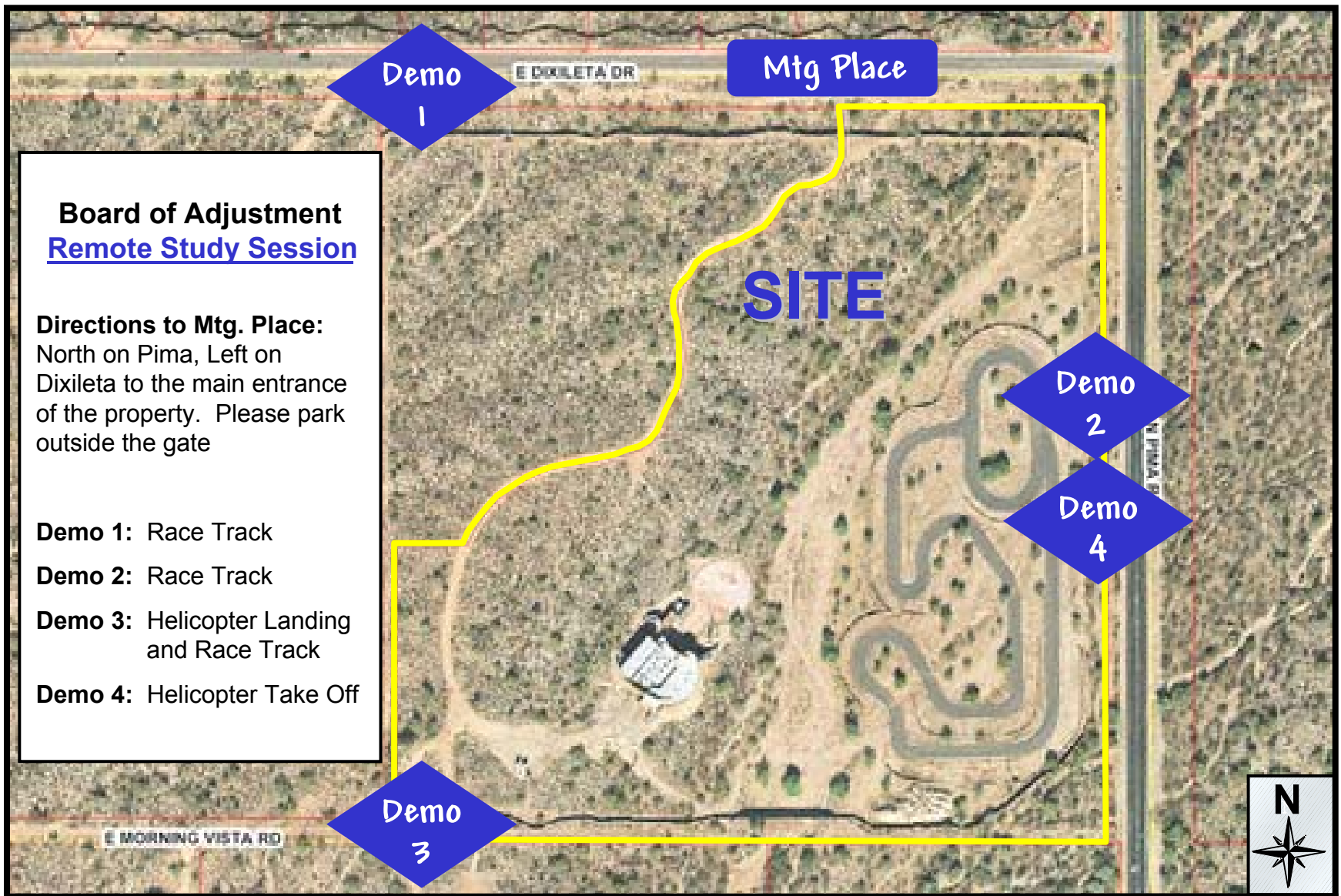
This site visit opportunity is designed for the Board to become familiar with the issues that will be discussed at your October 8<sup>th</sup> meeting regarding this property. Attached are the following documents:

- 1) A map of the property showing the meeting place and locations of site observation; and
- 2) A narrative that has been provided by the property owner, Mr. Tommy Constantine, describing the vehicles used on the track and also the type of helicopter that has landed on the site.

On Saturday, the Board will meet at 9am at a gate along Dixileta Drive, just west of Pima Road. From that point, staff and the board members will ride in a City vehicle to locations surrounding the property to observe the site while the owner, Mr. Constantine, demonstrates the use of the race-rack. Following the race-rack demonstration, there will be a helicopter landing and take off.

The intent for this demonstration is so that you may become familiar with the activities that have taken place on this site in the past. Staff has no ability to influence the vehicles or helicopter that will be used on the track since the property owner is providing this demonstration. Please be aware that there may be citizens and other interested parties attending this site visit. Because this is a study session, and is not advertised as a public hearing, the Board must refrain from discussing the issues with the public that may be in attendance.

The attached map provides directions to where we will meet, and a route that we will follow for each demonstration. If you have any questions, please call me at 480-312-7059, or Kurt Jones at 480-312-2524.



## Study Session Demonstration Site

(8755 E. Dixileta Dr. – Race Track & Helicopter Landing Demonstration)

9/27/03 @ 9AM

**EARL, CURLEY & LAGARDE, P.C.**  
ATTORNEYS AT LAW

Telephone (602) 265-0094  
Fax (602) 265-2195

3101 North Central Avenue  
Suite 1000  
Phoenix, Arizona 85012

September 22, 2003

**VIA FACSIMILE**  
**480-312-7088**

Jayna Shewak  
Planning and Development Services  
City of Scottsdale  
7447 E. Indian School Road  
Scottsdale, Arizona 85251

Re: Constantine / Pima and Dixileta

Dear Jayna:

Attached per your request are descriptions of the go karts and helicopter that are the only types of go kart and helicopter that have been used on the Constantine property. This same type of go kart and helicopter was used for the sound demonstration for the Staff and will be used for the sound demonstration for the Board of Adjustment on Saturday, September 27, 2003. If you require further information please let me know.

Very truly yours,

Lynne A. Lagarde

LAL/mr  
cc: Tommy Constantine  
Attachment

## CONSTANTINE

### GO KART AND HELICOPTER DESCRIPTION

The go karts used on the Constantine recreational tract are 125 cc “shifter” karts. The kart engines are either Honda, Kawasaki or Yamaha engines, which are commonly used on dirt bikes. However, Mr. Constantine has spent thousands of dollars engineering a sound deadening system for go karts used on his property. The sound mitigation includes a special exhaust system with two oversized mufflers. Each of the two mufflers is four times the size of a regular dirt bike muffler. The mufflers are plumbed in series which means that the first muffler accepts the noise from the engine then releases it to the inlet of another equal size muffler. This is significantly different from and far superior to a parallel dual muffler system in which one muffler is handling one side of the engine’s exhaust independently of the other muffler which is handling the other side of the engine’s exhaust.

This muffler system has been over-engineered for the specific purpose of keeping noise to a minimum. A carbon fiber shroud system has also been engineered which covers the entire engine and exhaust system to minimize any resonance. The underside of the carbon fiber shroud is lined with two-inch thick sound deadening foam from commercial aviation. This is the same type of foam used in the walls of a Boeing jet and is similar to the foam under the hood of a BMW only more effective. The result of this engineering and modification of the go karts is that the karts are quieter than the ambient noise in the area, significantly quieter than dirt bikes used in the area which have the same unshrouded engines. As shown by sound tests performed at the time of the staff inspection at the site the go karts produce noise at conversation levels inside the property and no noise that could be measured at points outside the property. The only go karts allowed on the Constantine property are those go karts which meet these specifications.

The helicopter is a McDonnell Douglas 520 N (NOTAR). This is the only type of helicopter ever owned by Mr. Constantine. The helicopter is designed specifically for quiet operation, which is achieved primarily through the elimination of the rear rotar blades. The NOTAR helicopter is used by law enforcement because of its quiet operation. There are comparable products such as a Eurocopter with a Fenestron Tail Rotar, which is a shielded tail rotar, and most new helicopter products such as this one are designed for quiet operation. Although McDonnell Douglas pioneered this technology, there are equally quiet products from various manufacturers and this is the only type of helicopter that would ever be used on the Constantine property. The difference in sound emanating from a NOTAR or other quiet helicopters from older, more typical helicopters, with which most people are familiar, is significant. The NOTAR was specifically purchased at a higher premium cost by Mr. Constantine because of its quiet operation. Mr. Constantine will use only the NOTAR or another quiet operation helicopter on his property.